

REMARKS

By this Amendment, claims 1, 12, 13 and 14 are amended to merely clarify the recited subject matter. Support for these claim amendments may be found in the specification, e.g., paragraph [0022] and Fig. 3a. Claims 12 and 13 have been allowed. Claims 5, 7, and 9-11 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant delays rewriting those claims at this time to afford the Office the full opportunity to reconsider the patentability of the rejected independent claims based on the following remarks. Claims 1-14 are pending.

Claims 1-4, 6, 8 and 14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong (U.S. Patent No. 3,916,949) in view of Sugarman et al. (U.S. Patent No. 5,567,909; hereafter "Sugarman"). Applicant traverses the rejection because the cited prior art references, analyzed individually or in combination, fail to disclose, teach or suggest all the features recited in the rejected claims and one of ordinary skill in the art would not have combined the teachings of the cited prior art references as hypothesized by the Office Action.

CITED PRIOR ART FAILS TO TEACH OR SUGGEST ALL CLAIM FEATURES

For example, the cited prior art fails to disclose, teach or suggest the claimed invention wherein either the first treatment system or the second treatment system includes a wall wherein the transfer slot is located, the transfer slot being configured to be sealed closed upon the compression of a sealing device which thereby provides a vacuum seal between the first treatment system and the second treatment system, as recited in each of the independent claims.

As recognized by the Office Action, Armstrong fails to teach or suggest the vacuum feed through recited in the rejected claims. Moreover, Armstrong fails to teach or suggest a system wherein there is vacuum isolation between treatment systems or chambers. Rather, in Armstrong, any and all seals merely provide closure but not the vacuum isolation provided by the claimed invention.

Sugarman fails to remedy the deficiencies of Armstrong because Sugarman merely discloses a combined wafer support and thermocouple assembly, which includes a wafer support basket with a plurality of wafer support fingers for collectively supporting a wafer. Although Sugarman discloses that its invention may be incorporated in a vacuum-processing reactor 5, Sugarman fails to disclose, teach or suggest any configuration that would provide

vacuum isolation between a plurality of chambers, as recited in the rejected independent claims.

Accordingly, the combined teachings of Armstrong and Sugarman fail to disclose, teach or suggest the claimed invention.

#### DEFICIENT MOTIVATION TO COMBINE REFERENCES

The Office Action asserted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gate valve and method of operating the gate valve of Armstrong by using a vacuum feed through as allegedly taught by Sugarman in order to maintain a vacuum within the gate valve and to inhibit any material that is passing through the valve from exiting the valve through the hinge.

However, it is unclear why one of ordinary skill in the art would have required a vacuum in order to impede exiting material through Armstrong's hinge. Moreover, neither Armstrong nor Sugarman indicate a need to provide vacuum isolation for Armstrong's chamber.

Nevertheless, the requisite standard for motivation to combine references requires a showing that one of ordinary skill in the art would have been motivated to combine the references not that they could have combined the references. Under MPEP 2143, to establish a *prima facie* case of obviousness, three basic criteria must be met. Primarily, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Thus, the Office Action's statement of motivation to combine is insufficient to adequately set forth why one of ordinary skill in the art would have been motivated the teachings of the cited prior art to provide Applicant's claimed invention.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). Therefore, Applicant submits that the motivation to combine the teachings of Armstrong and Sugarman is merely a product of impermissible hindsight analysis with

reference to Applicant's own specification. Accordingly, it is insufficient to support the issued obviousness rejection.

Because the hypothesized motivation to combine the reference teachings is insufficient to support a prima facie case of obviousness, the independent claims and their associated dependent claims are allowable and the prior art rejections are traversed.

All rejections having been addressed, Applicant requests issuance of a notice of allowance indicating the allowability of all pending claims. If anything further is necessary to place the application in condition for allowance, Applicant requests that the Examiner contact Applicant's undersigned representative at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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